

ABSTRACT OF THE DISCLOSURE

To update the control value to a value of higher precision in a predistortion type distortion compensation apparatus for compensating the distortion occurring in an amplifier for amplifying an input signal by the control using a control value corresponding to the level of the input signal.

Distortion generating means (1) generates distortion in an input signal, input signal level detecting means (3) detects the level of the input signal, distortion control means (4) controls the distortion generated by the distortion generating means 1 by using a control value corresponding to the level of the detected input signal, distortion component level detecting means (7) detects the level of distortion component contained in the amplified signal issued from the amplifier (2), integrating means K1 to KN integrate the level of the distortion component detected at every level of the detected input signal, and control value updating means (10) updates the control value corresponding to the level so that the integration result at every level of the input signal may be small.